



# SPDX Tooling: Production and Consumption



# Agenda

- Introductions
- UNO SPDX Architecture
- Resources – SPDX Tools
- Future Directions –SPDX Tools

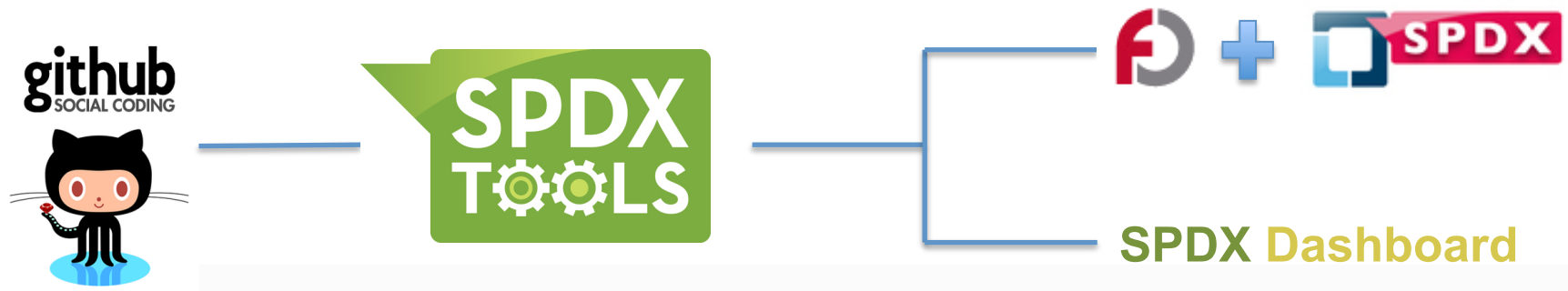


# Introductions

- Sam Adams, Jake Cloyd, Scott Humlicek, & Mike Santo
  - College of IS&T students
- Liang Cao
  - College of IS&T masters student
- Matt Germonprez
  - College of IS&T professor



# UNO SPDX Architecture





Search or type a command

Explore Gist Blog Help



germonprez



## spdx-tools

Joined on Feb 11, 2013

2

public repos

0

private repos

6

members

Repositories

Members

Edit spdx-tools's Profile

Find a Repository...

All Public Private Sources Forks Mirrors



### fossology-spdx

FOSSology plugin for SPDX

Last updated 12 hours ago

PHP

★ 0

🔗 2



### spdx-dashboard

Dashboard for SPDX


Last updated 2 days ago

Ruby

★ 0

🔗 1

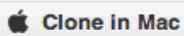




<https://github.com/spdx-tools>


PUBLIC  **spdx-tools / spdx-dashboard**

[Pull Request](#) [Unwatch](#) [Star](#) [0](#) [Fork](#) [1](#)

<b>Code</b>	Network	Pull Requests <b>0</b>	Issues <b>0</b>	Wiki	Graphs	Settings
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Dashboard for SPDX — [Read more](#)


















branch: **master** [Files](#) [Commits](#) [Branches](#) **1** [Tags](#)

**spdx-dashboard** / [+](#)

[68 commits](#)

ensure encoding when parsing files		
 <b>Chairmonkey</b> authored 2 days ago		latest commit <a href="#">c1fdc9ae75</a> 
 <a href="#">app</a>	2 days ago	ensure encoding when parsing files [ <a href="#">Chairmonkey</a> ]
 <a href="#">images</a>	13 days ago	created image archive folder [ <a href="#">dyolceka</a> ]
 <a href="#">.gitignore</a>	3 days ago	upload tag files for spdx docs [ <a href="#">Chairmonkey</a> ]
 <a href="#">LICENSE</a>	25 days ago	LICENSE/FreeBSD [ <a href="#">germonprez</a> ]
 <a href="#">README.md</a>	a month ago	Update README.md [ <a href="#">spdxtools</a> ]
 <a href="#">SPDXTagExample.tag</a>	2 days ago	ensure encoding when parsing files [ <a href="#">Chairmonkey</a> ]
 <a href="#">erd.pdf</a>	18 days ago	updated erd [ <a href="#">Chairmonkey</a> ]

PUBLIC



spdx-tools / spdx-dashboard



Pull Request



Unwatch



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0



Fork

1

Code

Network

Pull Requests 0

Issues 0

Wiki

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Settings

Home

Pages

Wiki History

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# Home

New Page

Edit Page

Page History

[SPDX Dashboard Notes](#)

[SPDX Dashboard Schema](#)

[SPDX Dashboard Use Cases](#)

[SPDX Dashboard Work Allocation](#)

[SPDX Weekly Updates](#)

Last edited by dyolcekej, 15 days ago

 **Home Browse Upload Jobs Organize SPDX Help**

# Welcome to FOSSology

**FOSSology** is a framework for software analysis tools. With it, you can:

- Upload files into the fossology repository.
- Unpack files (zip, tar, bz2, iso's, and many others) into its component files.
- Browse upload file trees.
- View file contents and meta data.
- Scan for software licenses.
- Scan for copyrights and other author information.
- View side-by-side license and bucket differences between file trees.
- Tag and attach notes to files.
- Report files based on your own custom classification scheme.

### Where to Begin...

The menu at the top contains all the primary capabilities of FOSSology.

<https://fossology-demo.ist.unomaha.edu/>  
*to become*  
<https://fossologyspdx.ist.unomaha.edu/>



This option permits editing/creating a single SPDX file from analysed packages/files by FOSSology.  
Fields denoted by an \* are required.

<b>SPDX Version</b>	<input type="text" value="SPDX-1.1"/>
<b>Creator *</b>	<input type="text" value="Matt Germonprez"/>
<b>Creator optional1</b>	<input type="text" value="Option1"/>
<b>Creator optional2</b>	<input type="text" value="Option2"/>
<b>Created Date</b>	2013-03-29 13:18:58
<b>Data License</b>	CC0-1.0
<b>Creator Comment</b>	<input type="text" value="Professor at UNO"/>
<b>Document Comment</b>	<input type="text" value="Busybox SPDX"/>

Package(s)

<https://fossology-demo.ist.unomaha.edu/>

## SPDX Edit

[login](#)

This option permits editing/creating a single SPDX file from analysed packages/files by FOSSology.

<b>SPDX Version</b>	SPDX-1.1
<b>Creator</b>	Matt Germonprez
<b>Creator optional1</b>	Option1
<b>Creator optional2</b>	Option2
<b>Created Date</b>	2013-03-29 13:18:58
<b>Data License</b>	CC0-1.0
<b>Creator Comment</b>	Professor at UNO
<b>Document Comment</b>	Busybox SPDX
<b>Output File Type</b>	<input type="text" value="SPDX-TAG"/>

Package(s)

Name	Version	Source Info	Description	Package Edit	File List	Extracted Lic Info List
busybox-1.20.2.tar.bz2	1.20.2	UNO Test	busybox version 1.20.2	<a href="#">Detail/Edit</a>	<a href="#">File List</a>	<a href="#">Extracted Lic Info List</a>

<https://fossology-demo.ist.unomaha.edu/>

## Package Info Edit

[login](#)

This option permits editing a single package.  
 Fields denoted by an \* are required.

<b>Package Name *</b>	<input type="text" value="busybox-1.20.2.tar.bz2"/>
<b>Package Version</b>	<input type="text" value="1.20.2"/>
<b>Package FileName</b>	<input type="text" value="busybox-1.20.2.tar.bz2"/>
<b>Package Supplier</b>	<input type="text" value="Person:"/> <input type="text" value="Tom Jones"/>
<b>Package Originator</b>	<input type="text" value="Organization:"/> <input type="text" value="Some Company"/>
<b>Package Download Location *</b>	<input type="text" value="http://somelocation"/>
<b>Package Checksum</b>	DD2E3684B13C0071D480E97B569041E69538E798
<b>Package Verification Code</b>	<input type="text" value="71f27c0d259718243a9b10c39430e0a8eb85e336"/> <input type="button" value="Create Verification Code"/>
<b>Verification Code Excluded Files</b>	<input type="text" value="*.spdx"/>
<b>Source Info</b>	<input type="text" value="UNO Test"/>

<https://fossology-demo.ist.unomaha.edu/>



## fossology **SPDX File Edit Input**

This option permits editing a single file.  
Fields denoted by an \* are required.

<b>Package Name</b>	Linux Kernel v3.8.1	
<b>File Name</b>	./Linux Kernel v3.8.1/Linux Kernel v3.8/linux-3.8.1/firmware/radeon/R200_cp.bin.ihex	
<b>File Type</b>	OTHER	
<b>Checksum</b>	93EC54D5B1C61874CFA0E0C6488CEDE2D0DEE00F	
<b>License Concluded*</b>	NOASSERTION	
<b>License Info In File</b>		
<b>License Comments</b>		
<b>File Copyright Text</b>		
<b>Artifact of Project</b>		
<b>Artifact of Homepage</b>		
<b>Artifact of URL</b>		
<b>File Comment</b>		

<https://fossology-demo.ist.unomaha.edu/>





## Extracted Lic Info List

Package: Linux Kernel v3.8.1

Identifier	Extracted Text	License Name	Cross Reference URLs	Comment
LicenseRef-0	License by Nomos.	GPL_v1		<a href="#">edit</a>
LicenseRef-1	License by Nomos.	HP-possibility		<a href="#">edit</a>
LicenseRef-2	License by Nomos.	LGPL		<a href="#">edit</a>
LicenseRef-3	License by Nomos.	MIT-style		<a href="#">edit</a>
LicenseRef-4	License by Nomos.	MPL		<a href="#">edit</a>
LicenseRef-5	License by Nomos.	Same-license-as		<a href="#">edit</a>

<https://fossology-demo.ist.unomaha.edu/>



## Request Instances Wizard




Cancel

CHOOSE AN AMI | INSTANCE DETAILS | CREATE KEY PAIR | CONFIGURE FIREWALL | REVIEW

Choose an Amazon Machine Image (AMI) from one of the tabbed lists below by clicking its **Select** button.

Quick Start | My AMIs | **Community AMIs** | AWS Marketplace

Viewing: All Images  1 to 1 of 1 Items

AMI ID	Root Device	Manifest	Platform	
 ami-1a6af273	ebs	186210339502/fossology-spdX	 Other Linux	Select 

★ Free tier eligible if used with a micro instance. See [AWS free tier](#) for complete details and terms.

# FOSSology + SPDX: More Information

- License
  - Apache 2.0
- Code
  - PHP
- GitHub Repository
  - <https://github.com/spdx-tools/fossology-spdx>
- Public Instance
  - <https://fossology-demo.ist.unomaha.edu/>

# FOSSology + SPDX: Future

- Attribution Document
- Align with FOSSology release
- Integration with FOSSology 2.1.1
  - New license tables



## SPDX Documents

Add tag file  No file chosen

SPDX name	Date uploaded		
BusyBox.tag	March 27 - 8:02 pm	View	Download
spdx.tag	March 27 - 1:51 am	View	Download

<https://spdxhub.ist.unomaha.edu/>



## SPDX Docs > BusyBox.tag

### Document Info

File name	BusyBox.tag
Date uploaded	March 27 - 8:02 pm
Date generated	March 26 - 4:27 pm
SPDX version	SPDX-1.1

Download .tag

Comment on this SPDX document

Add comment

View comments (0)

### Package Info

Package name	busybox-1.20.2.tar.bz2
File name	busybox-1.20.2.tar.bz2
Package files	1769 total (click to view)
Package version	1.20.2
Originator	Person:NOASSERTION

Comment on this package

Add comment

View comments (0)

<https://spdxhub.ist.unomaha.edu/>

SPDX Dashboard

## SPDX Docs > BusyBox.tag > Comments

This is a comment on the document

March 29 - 6:54 pm

This is another comment on the document

March 29 - 6:55 pm

Add a new comment

<https://spdxhub.ist.unomaha.edu/>

Download location	NONE
Description	busybox version 1.20.2
Copyright	NONE
Licenses	GPL LGPL Public-domain Free-SW BSD-style GPL_v2-possibility See-doc(OTHER) UnclassifiedLicense Artistic MIT-style See-file(LICENSE) W3C-style GPL-Bison-exception FSF BSD-lite X11-style RSA-Security Public-domain(C)

[View files \(1769\)](#)

<https://spdxhub.ist.unomaha.edu/>

# SPDX Dashboard: More Information

- License
  - Free BSD
- Code
  - Ruby
- GitHub Repository
  - <https://github.com/spdx-tools/spdx-dashboard>
- Public Instance
  - <https://spdxhub.ist.unomaha.edu/>

# SPDX Dashboard: Future

- Single SPDX Analysis
- Multi SPDX Compare
- Attribution Document
- Conjunctive/Disjunctive Display

# Future Directions

- Much of what we have to date is the result of conversations with people on this call
  - Thanks
- Our capacity is contingent on grant funding.
  - Balance between corporate and academic interests
  - Corporate/community support is appreciated:
    - Equipment // Grants // Internships
- See you at Collab